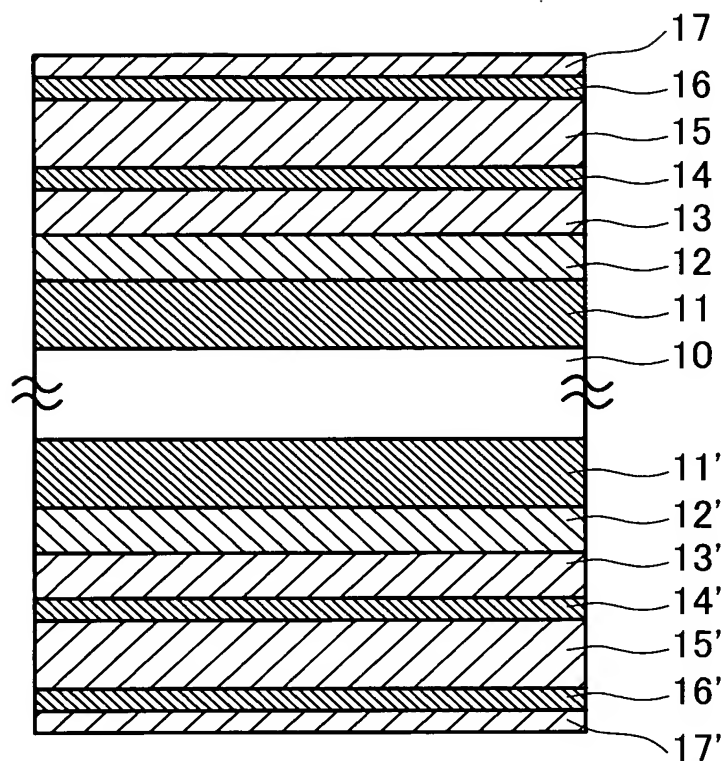
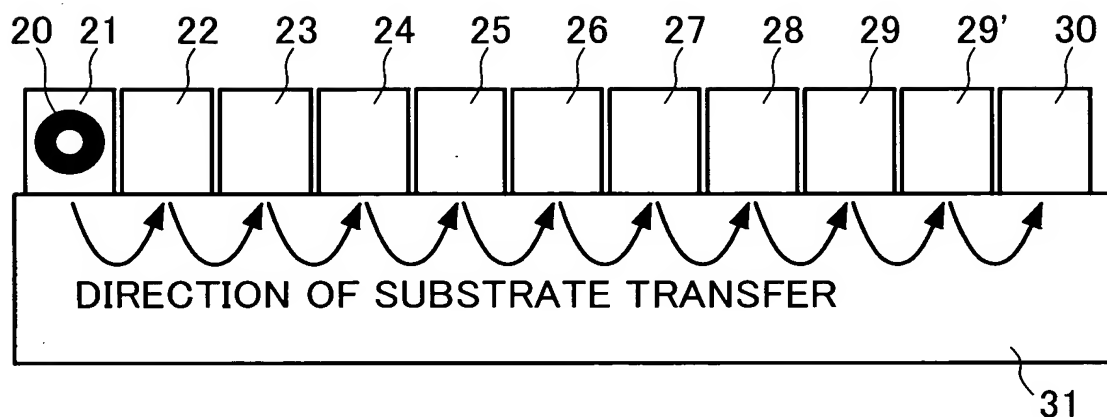


FIG.1



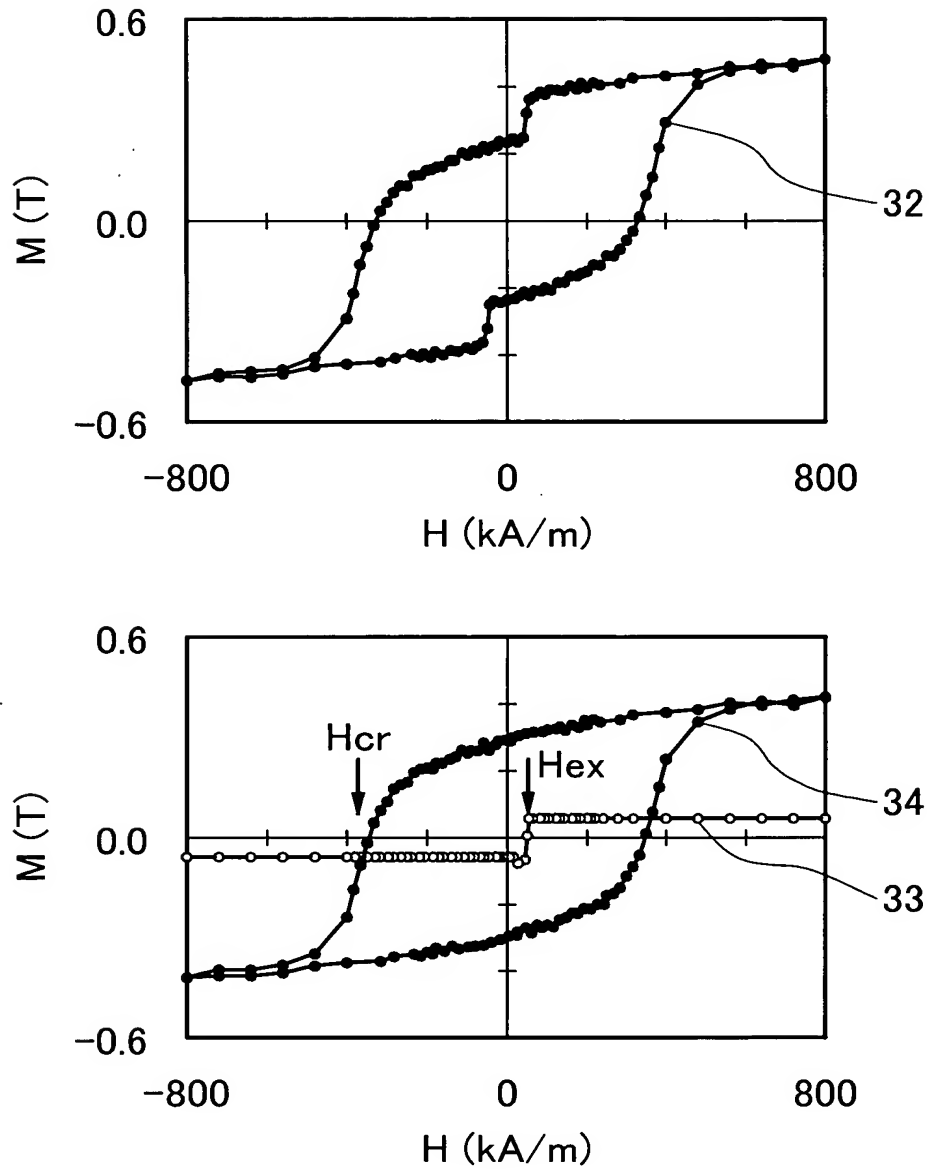
- 10SUBSTRATE
 11,11'...SEED LAYER
 12,12'...UNDER LAYER
 13,13'...THE FIRST MAGNETIC LAYER
 14,14'...NON-MAGNETIC INTERMEDIATE LAYER
 15,15'...THE SECOND MAGNETIC LAYER
 16,16'...PROTECTIVE LAYER
 17,17'...LUBRICANT LAYER

FIG.2



- 20...SUBSTRATE
 21...LOAD-LOCK CHAMBER
 22...SEED LAYER FORMING CHAMBER
 23...HEATING CHAMBER
 24...UNDERLAYER FORMING CHAMBER
 25...UNDERLAYER FORMING CHAMBER
 26...MAGNETIC LAYER FORMING CHAMBER
 27...NON-MAGNETIC INTERMEDIATE LAYER FORMING CHAMBER
 28...MAGNETIC LAYER FORMING CHAMBER
 29,29'...PROTECTIVE LAYER FORMING CHAMBER
 30...UNLOAD-LOCK CHAMBER
 31...MAIN CHAMBER

FIG.3

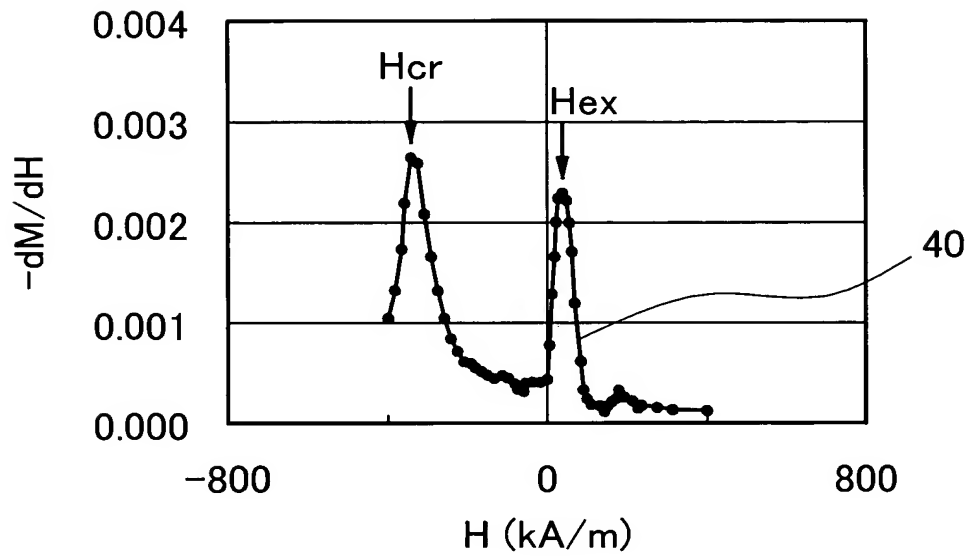


32...MAGNETIZATION CURVE

33...MAGNETIZATION CURVE OF THE FIRST MAGNETIC LAYER
WHICH IS OBTAINED WITH THE MAGNETIZATION CURVE 32

34...MAGNETIZATION CURVE OF THE SECOND MAGNETIC LAYER
WHICH IS OBTAINED WITH THE MAGNETIZATION CURVE 32

FIG.4



40...CURVE WHICH IS OBTAINED BY DIFFERENTIATING
THE MAGNETIZATION M BY THE MAGNETIC FIELD
 H ON THE MAGNETIZATION CURVE 32

FIG.5

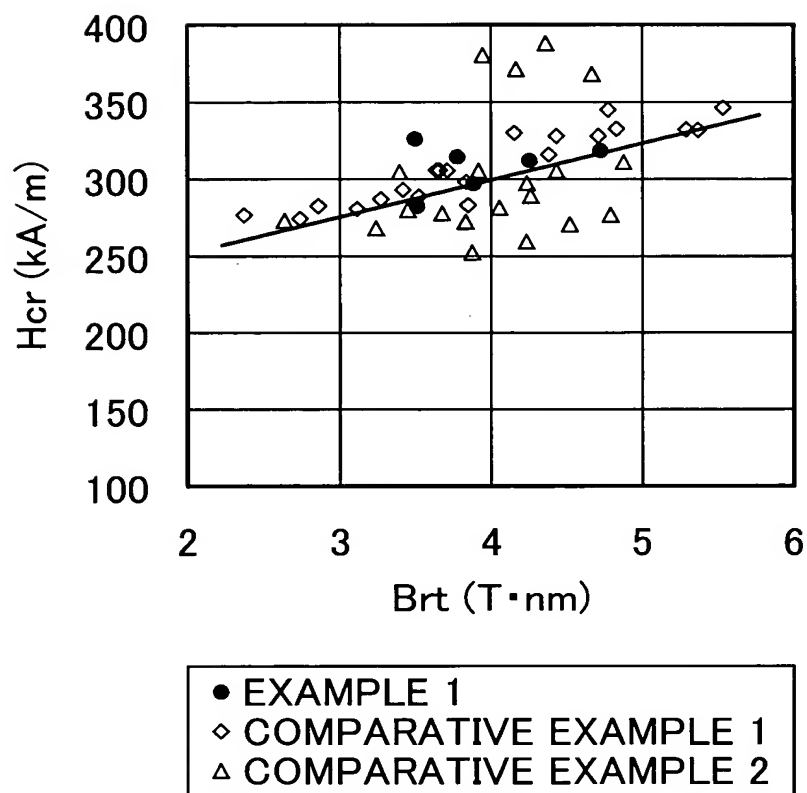


FIG.6

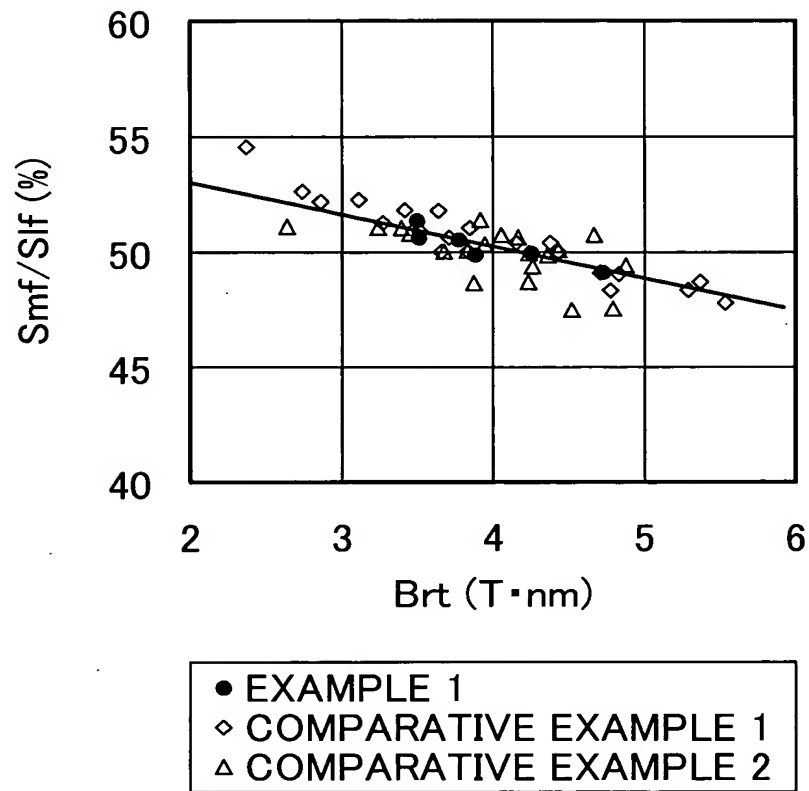


FIG.7

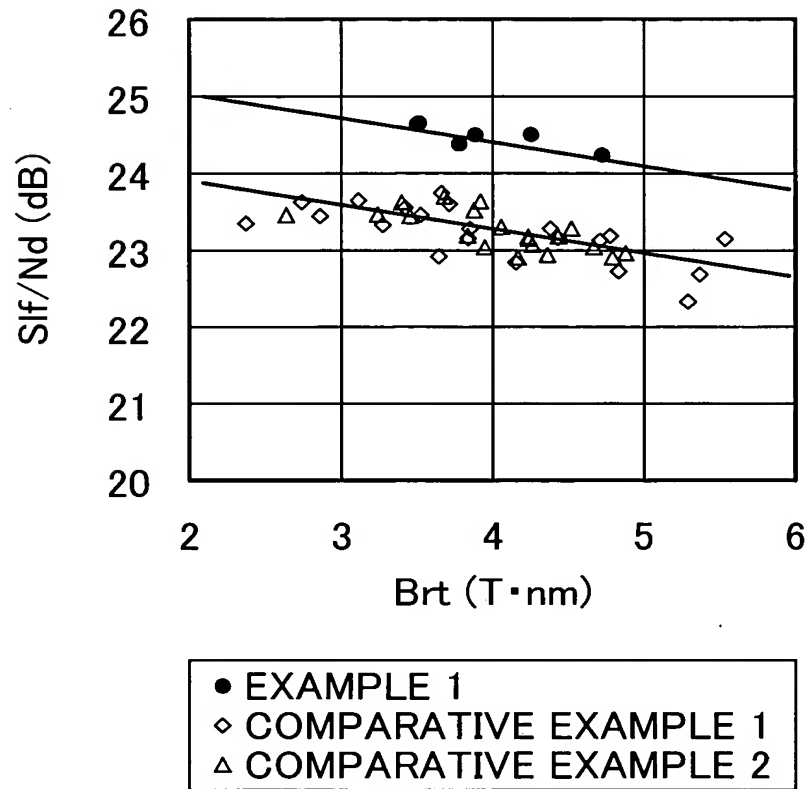


FIG.8

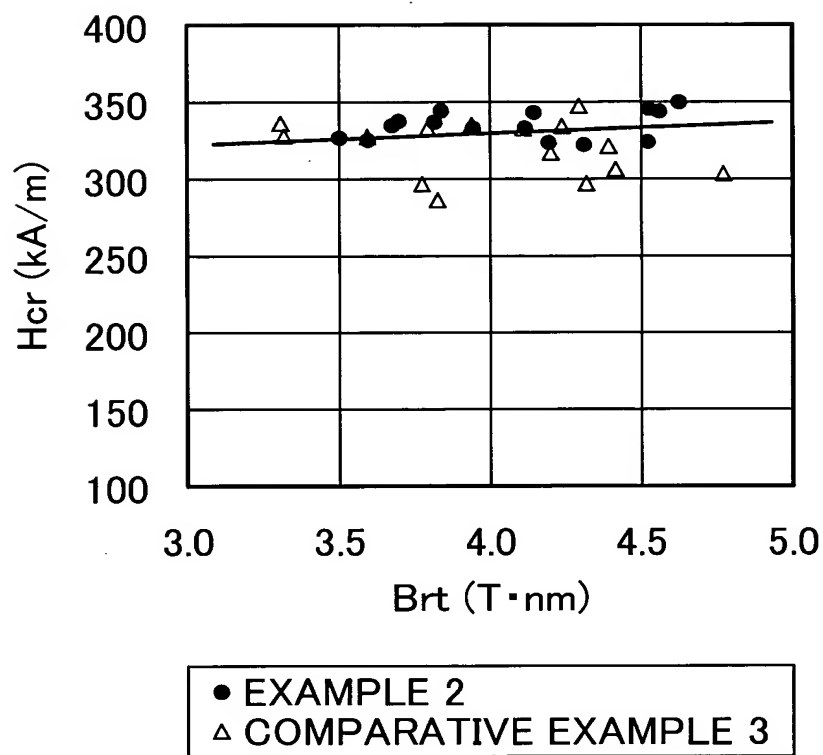


FIG.9

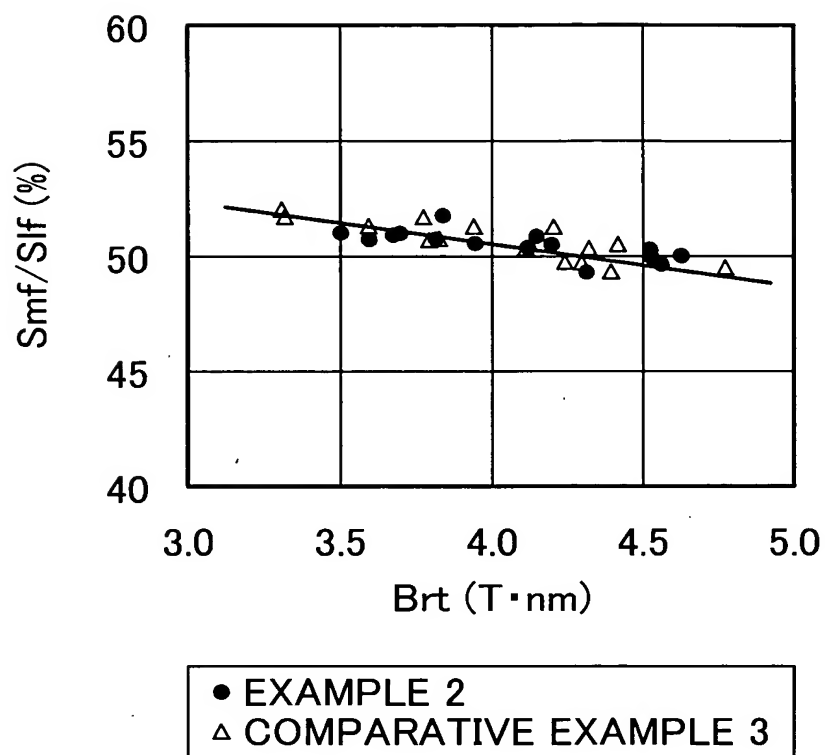


FIG.10

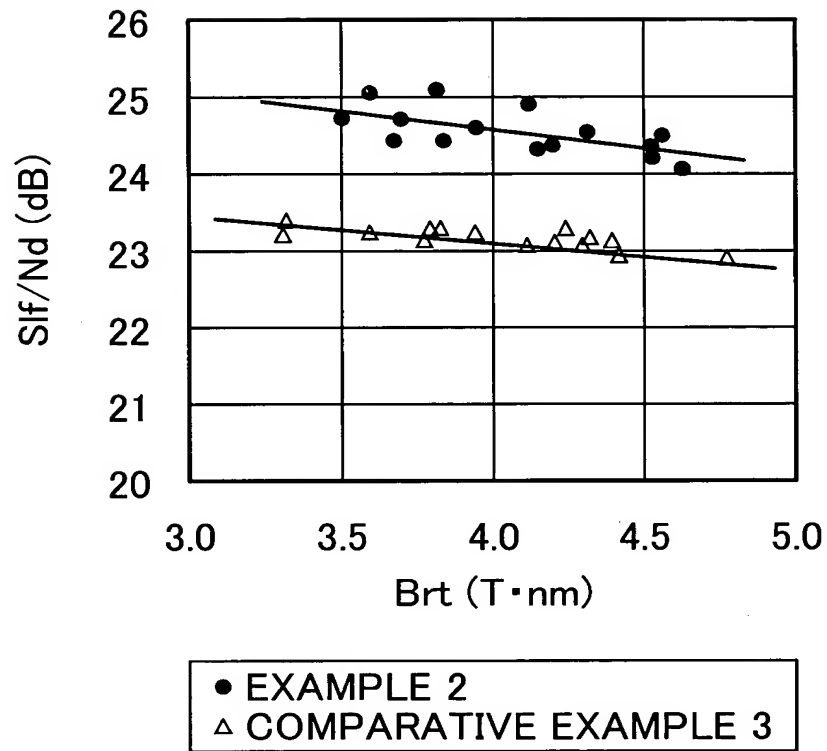


FIG.11

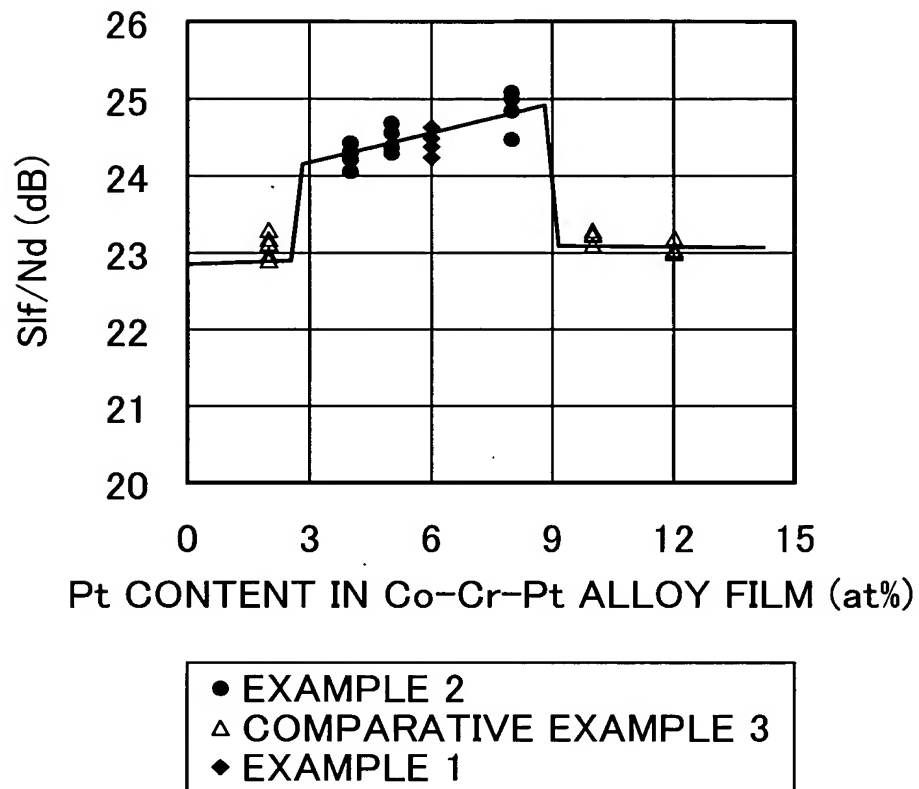


FIG.12

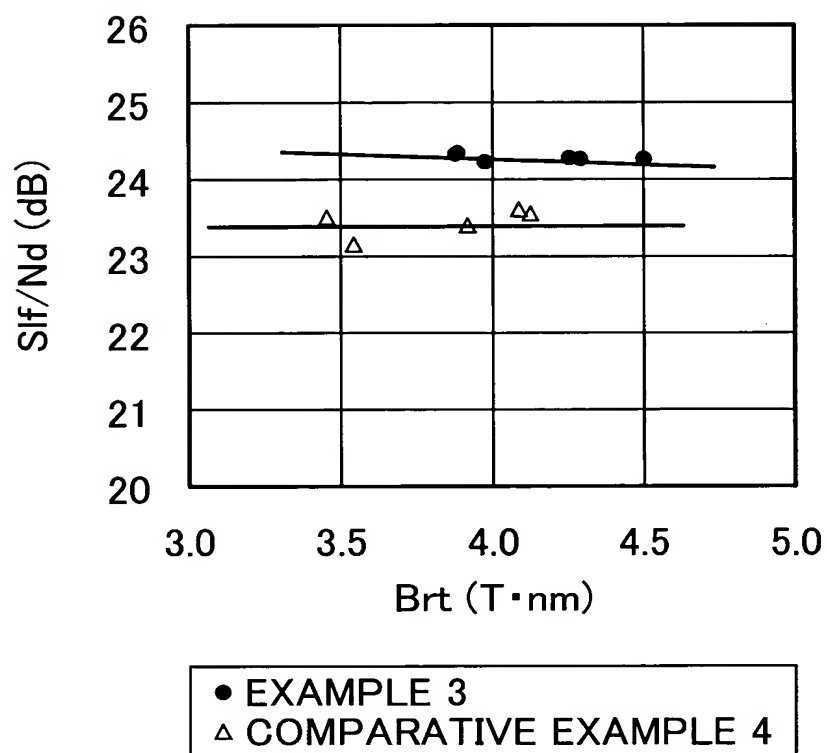


FIG.13

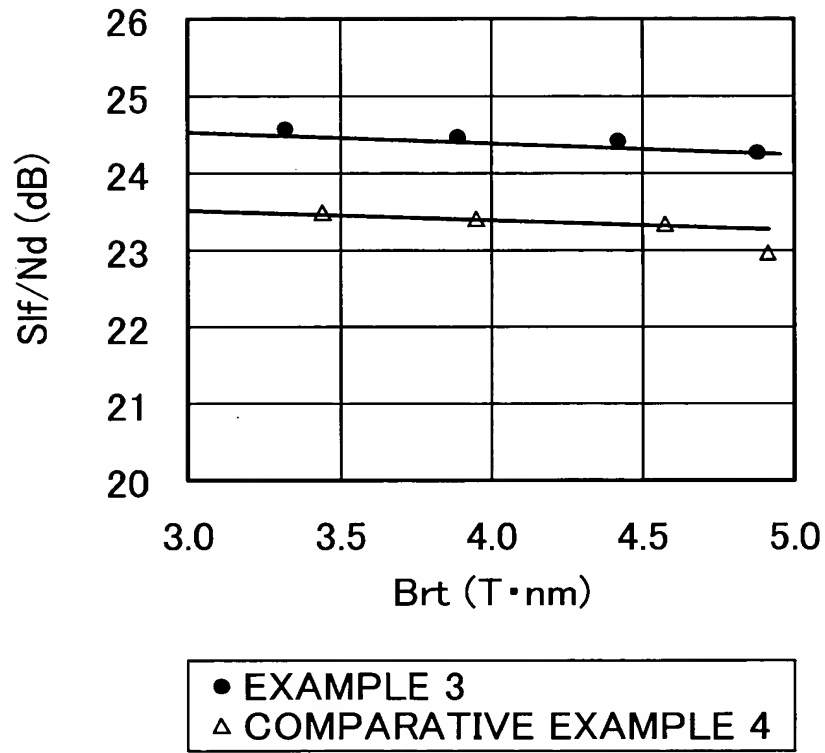


FIG.14

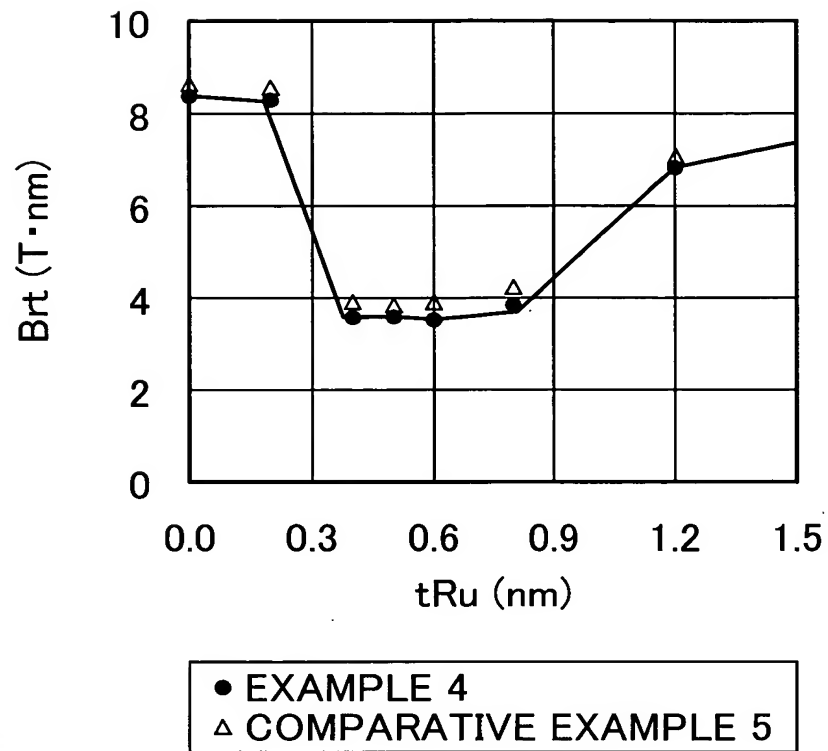


FIG.15

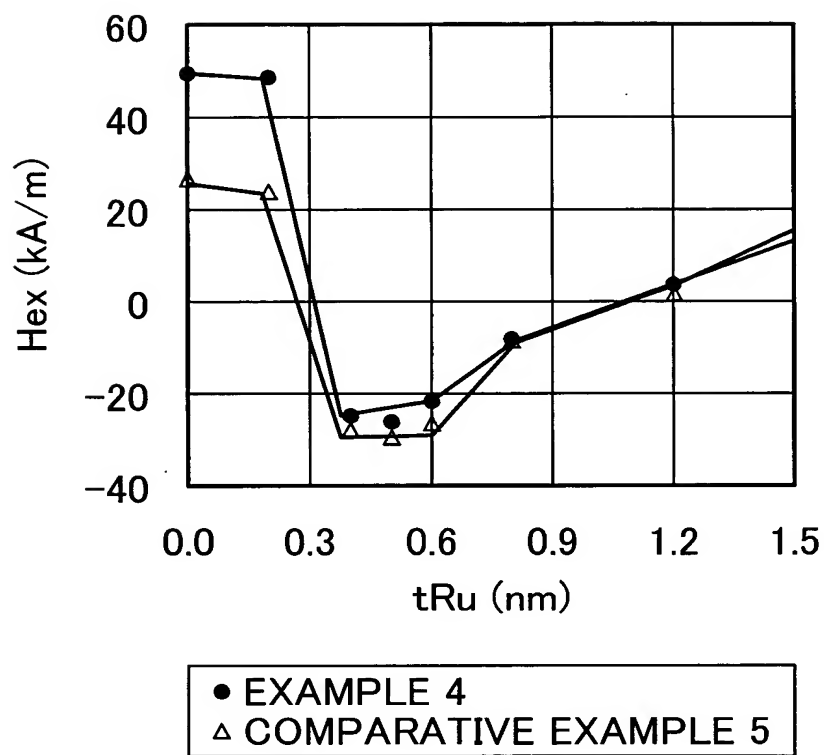


FIG.16

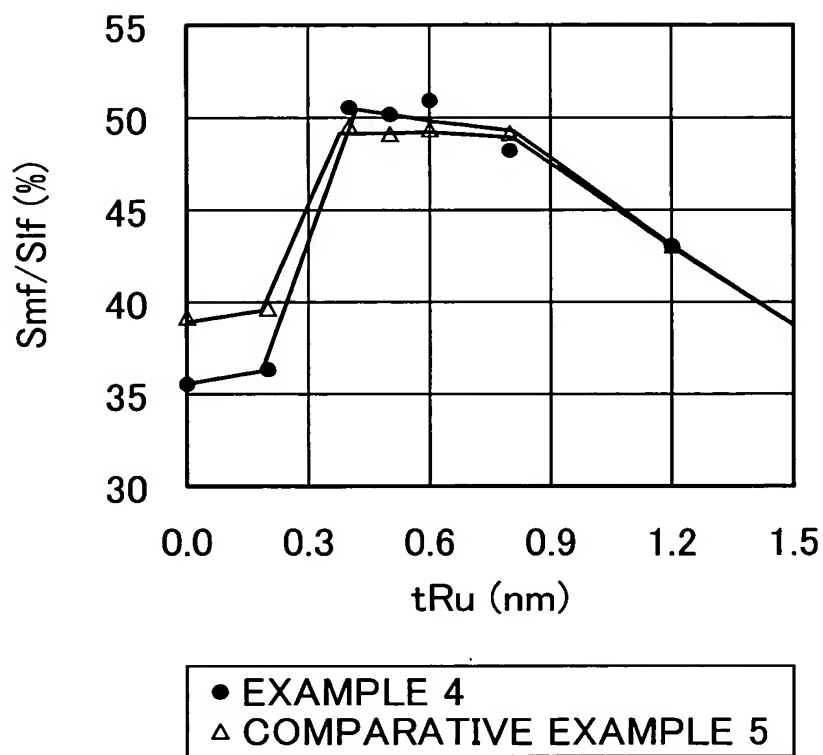


FIG.17

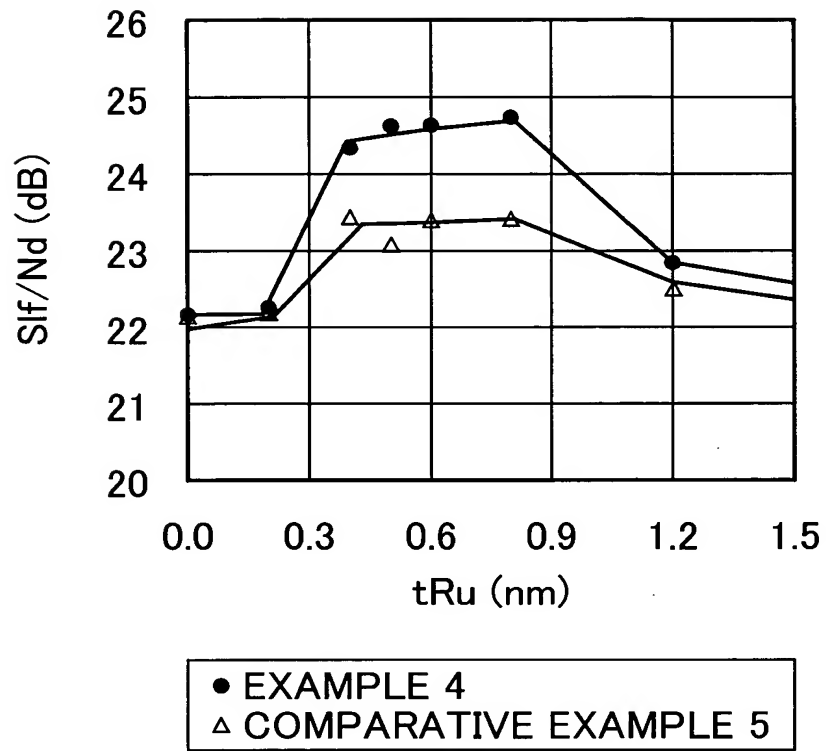


FIG.18

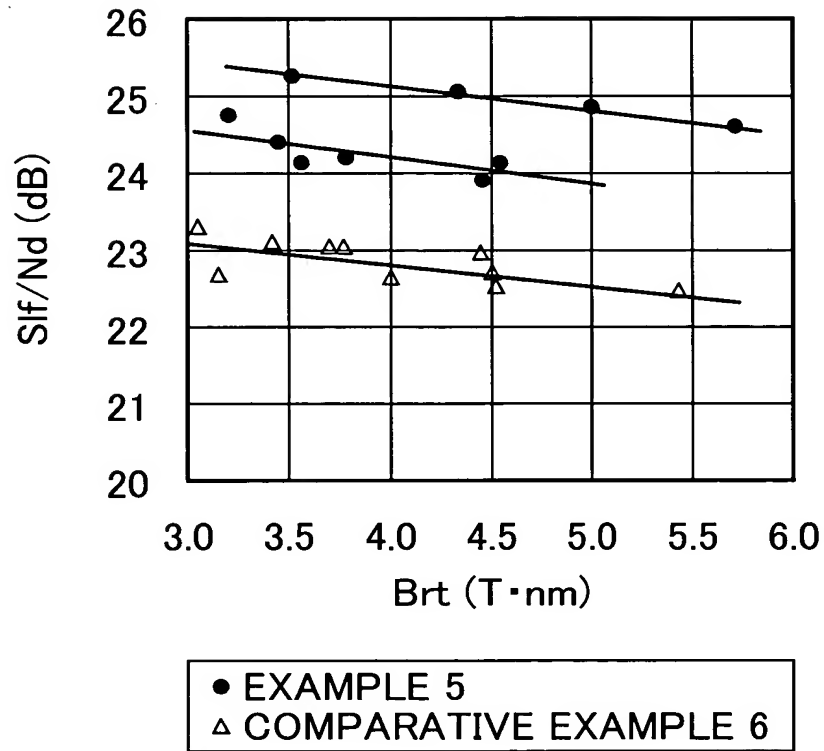
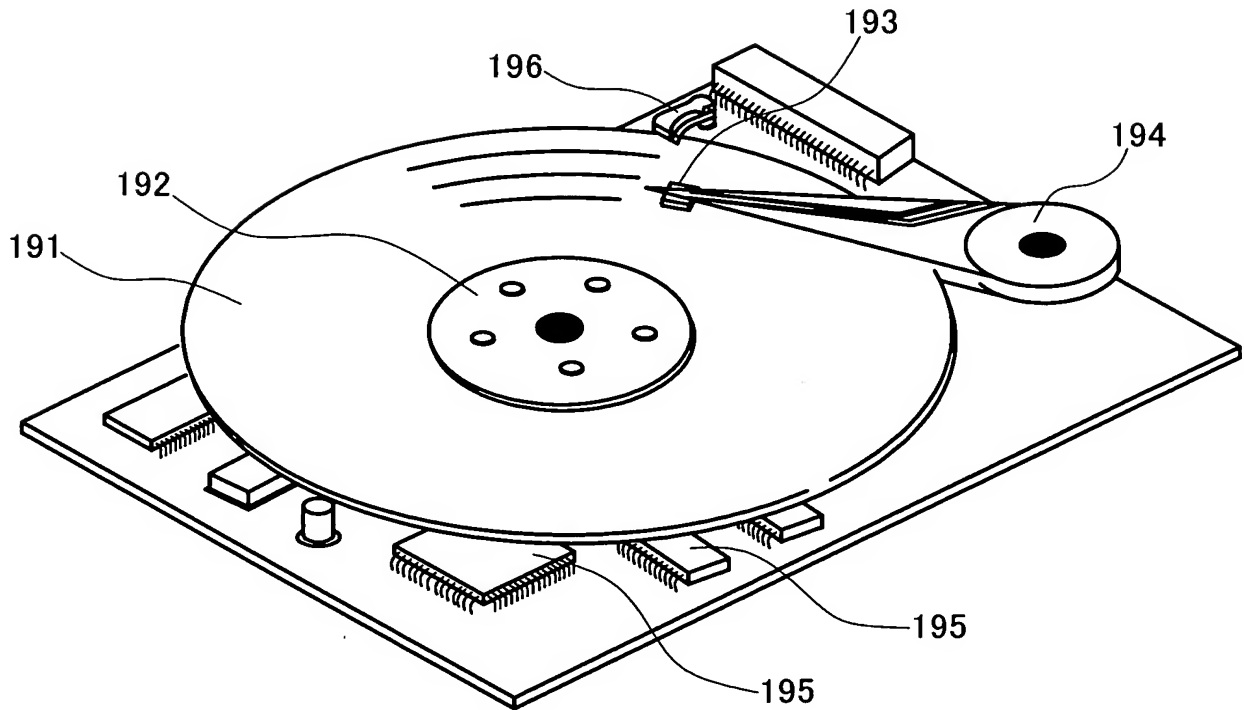


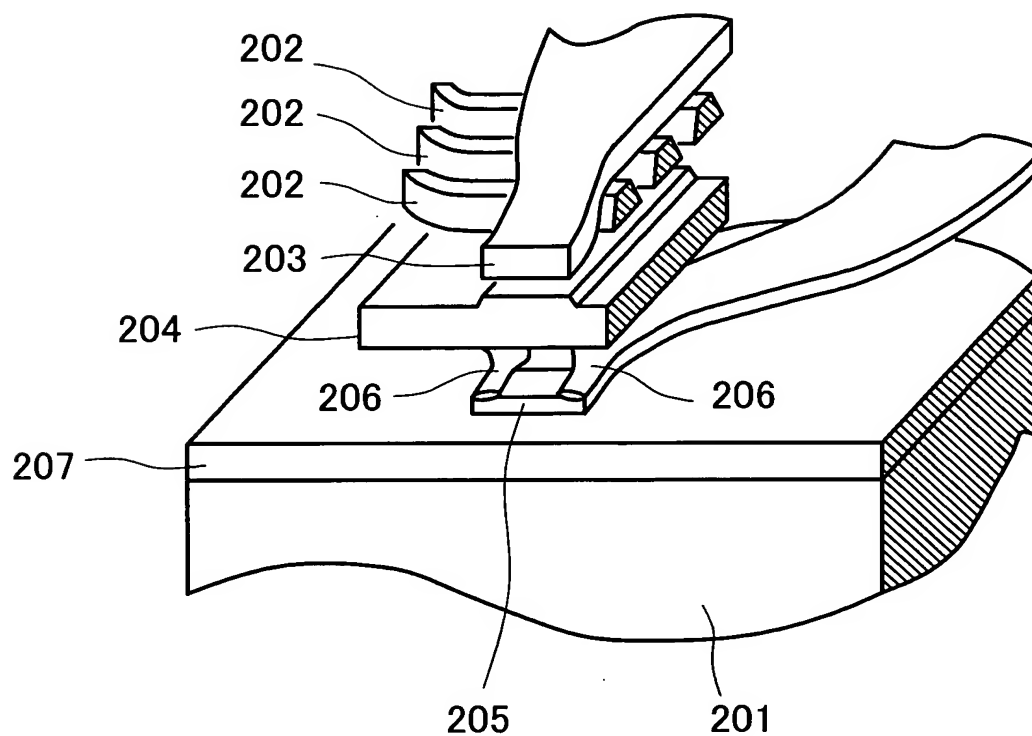
FIG.19



- 191...MAGNETIC RECORDING MEDIUM
 192...DRIVING UNIT FOR ROTATING THE MAGNETIC
 RECORDING MEDIUM
 193...MAGNETIC HEAD
 194...HEAD ACCESS SYSTEM FOR DRIVING
 THE MAGNETIC HEAD
 195...WRITE/READ SIGNAL PROCESSING MEANS
 196...HEAD UNLOADING MECHANISM

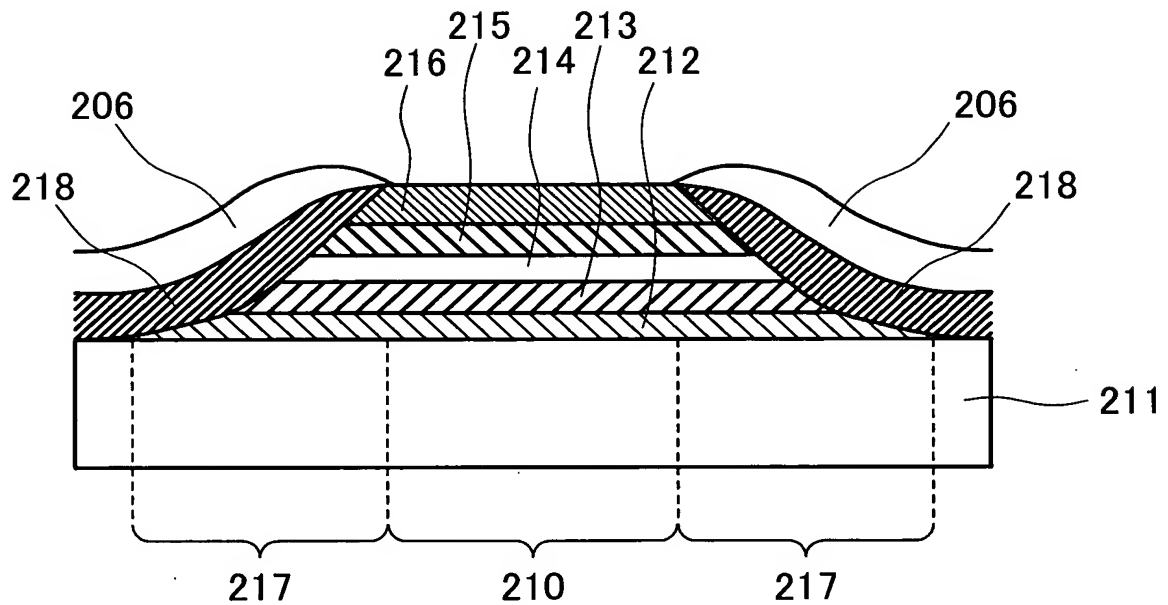
1006733.0001

FIG.20



- 201...SUBSTRATE
202...COIL
203...UPPER MAGNETIC POLE
204...LOWER MAGNETIC POLE/UPPER SHIELD LAYER
205...MAGNETORESISTIVE SENSOR
206...ELECTRODE PATTERN
207...LOWER SHIELD LAYER

FIG.21



- 210...SIGNAL SENSING REGION
- 211...GAP LAYER
- 212...Ta BUFFER LAYER
- 213...FIRST MAGNETIC LAYER
- 214...INTERMEDIATE LAYER
- 215...SECOND MAGNETIC LAYER
- 216...ANTIFERROMAGNETIC ALLOY LAYER
- 217...TAPERED PORTION
- 218...PERMANENT MAGNETIC LAYER